



**Comhairle Cathrach  
& Contae Phort Láirge**  
Waterford City  
& County Council

Chief Executive's

Report on Submissions received

to the

Waterford City & County Council

Climate Change Adaptation

Strategy 2019 - 2024

Date: 3<sup>rd</sup> September 2019

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## **1.0 Introduction**

### **1.1 Purpose of the Report**

Waterford City and County Council has prepared a draft Climate Change Adaptation Strategy 2019-2024. This local authority climate change adaptation strategy forms part of Ireland's national strategy for climate adaptation as set out in the National Adaptation Framework (NAF) which was produced under the provisions of the Climate Action and Low Carbon Development Act 2015. It is tasked with mainstreaming climate change adaptation over time into all functions, operations and services of the local authority.

The draft strategy includes a range of actions across eight High Level Goals including:

- Business Operations & Continuity
- Infrastructure & Built Environment
- Land Use & Development Policy
- Water Services
- Natural Resources & Cultural Infrastructure
- Community Health & Well Being
- Biodiversity
- Coastal Flooding & Erosion

As part of the process of making this strategy a period of public consultation was undertaken from 22<sup>nd</sup> July 2019 to 19<sup>th</sup> August 2019 inclusive. Fourteen submissions were received within the timeframe specified.

This report on submissions received summarises and details the outcome of the public consultation stage and contains the following:

- List of persons or bodies who made submissions or observations on the Draft Climate Change Adaptation Strategy
- Summary of all issues raised by the persons or bodies in the submissions or observations; and
- Consideration, response and recommendation to the issues raised.

### **1.2 Background**

Ireland's first statutory National Adaptation Framework (NAF) was published in January 2018. This sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. The NAF was developed under the Climate Action and Low

Carbon Development Act 2015. The NAF outlines a whole of government and society approach to climate adaptation in Ireland. Under the NAF, a number of Government Departments are required to prepare sectoral adaptation plans in relation to a priority area for which they are responsible. Each Local Authority is also required to make a local adaptation strategy with an expected timeframe for completion by 30 September 2019.

As the level of government closest to local communities and enterprise and as first responders in many emergencies, it is acknowledged that local authorities are uniquely placed to effect real positive change with respect to delivery of the national transition objective to a low carbon and a climate resilience future.

The local authority adaptation strategy takes on the role as the primary instrument at local level to:

- (i) ensure a proper comprehension of the key risks and vulnerabilities of climate change
- (ii) bring forward the implementation of climate resilient actions in a planned and proactive manner
- (iii) ensure that climate adaptation considerations are mainstreamed into all plans and policies and integrated into all operations and functions of the local authority.

### **1.3 Next Steps**

The submissions received during the timeframe specified for public consultation have been examined and considered in this report in the context of their relevance and added value to the adaptation strategy.

Accordingly amendments will be made to the provisions of the strategy in form of new additional information and actions, supplementation or clarification of text, deletion of text and general grammatical and formatting enhancements.

Once finalised, the strategy must undergo assessment in accordance with the provisions of SEA regulations and the provisions of the Habitats Directive.

The final strategy, SEA Screening Report and Appropriate Screening Reports will be presented to council for approval by the elected members.

The timeframe for completion of the strategy and approval by the members is 30<sup>th</sup> September 2019.

## **2.0 Public Consultation**

### **2.1 Public Consultation**

Public consultation on the draft Climate Change Adaptation Strategy was carried out over a four week period from 22<sup>nd</sup> July 2019 to 19<sup>th</sup> August 2019.

Fourteen submissions were received within the timeframe specified.

The following documents were subject to the public consultation process:

- The Climate Change Adaptation Strategy as guided by the Local Authority Adaptation Strategy Development Guidelines (Dec, 2018),
- The Strategic Environmental Assessment (SEA) Screening Report undertaken in accordance with the provisions of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004 as amended by S.I. 200 of 2011).
- The Appropriate Assessment screening report undertaken in accordance with the requirements of Article 6(3) of the EU Habitats Directive (directive 92/43/EEC).

### **2.2 Details of the Public Consultation Process**

Methodology used for consultation with key stakeholders.

- Newspaper Notice was published in the Munster Express and Dungarvan Leader on week commencing 22<sup>nd</sup> July 2019.
- Public notice was published on the Council's website and the documents were available for download.
- Details were posted on the Council's Social Media
- All Elected Members of Waterford City & County Council were notified of the public consultation process prior to commencement.
- Draft documents were made available for public inspection at Customer Care desks in Waterford City and Dungarvan and at all Council Branch Libraries.
- Engagement with adjoining Local Authorities Cork County Council, Kilkenny County Council, Tipperary County Council and Wexford County Council.
- The CARO engaged with the Departments responsible for the development of sectoral adaptation plans inviting them to review the local authority adaptation strategies and to make submissions.
- The CARO identified key high level stakeholders according to their importance and relevance to the subject matter of local authority adaptation strategies and invited them to make review the local authority adaptation strategies and to make submissions.

## 2.3 Submissions

The table below identifies the submissions to the strategy. The submissions will be examined in further detail in section 3 of this report.

| Sub No. | Name/Organisation                                   |
|---------|---|
| 1       | Department of Agriculture, Food and the Marine      |
| 2       | Environmental Protection Agency                     |
| 3       | Fáilte Ireland                                      |
| 4       | Gas Networks Ireland                                |
| 5       | Geological Survey Ireland                           |
| 6       | Irish Water   |
| 7       | Office of Public Works                              |
| 8       | EcoMerit Environmental Business Support             |
| 9       | Waterford City & County Environmental Linkage Group |
| 10      | Cllr. Marc Ó Cathasaigh                             |
| 11      | Cllr. Jody Power                                    |
| 12      | Susan Gallagher                                     |
| 13      | Maoliosa Ní Chléirigh                               |
| 14      | Jane Russell-O'Connor                               |

### 3.0 Consideration of Submissions

**Sub No. 1:** Department of Agriculture, Food and the Marine

#### Summary of issues raised:

1. Farmers are the largest landowners within the County and have ability to aid WCCC in its adaptation and Mitigation efforts. Adaptation measures implemented by Farmers includes forestry planting/management, soil erosion, nutrient management, grazing management of sensitive soils, farming intensity within river catchments and many more issues will all influence adaptation/mitigation decisions at a county level.
2. Impacts of restricted water supplies to farmers during severe weather conditions.
3. Excess rainfall events will hamper the council's ability to provide basic services.
4. Impact on inland aquaculture and sea food related infrastructure such as costal harbours and piers.
5. Farmers and agricultural contractors in general have access to machinery and equipment that during previous severe weather events was utilised by local county councils for assistance with snow removal and flooding relief.
6. There will be an increased risk of uncontrolled fires that may occur as a result of hotter drier summers caused by climate change.
7. Issues with slurry storage and land spreading has been identified as an impact from the changing climate due to wetter winters affecting timing of slurry spreading. This may lead to nutrient loss and run off causing water quality issues for the local authority to monitor and manage. Increased ammonia emissions which will affect air pollution will be likely also due to spreading slurry when ammonia loss is at its highest.
8. Soil sediment run off would impact water quality in river catchments.
9. Non-native Invasive Species and damage to biodiversity.
10. Infrastructure damage and associated impacts including health and safety.
11. Food safety issues could potentially arise where irrigation interventions are required. In relation to groundwater, an action is noted to protect water sources and groundwater supply.

### Response to issues raised in submission:

1. The role and potential of farmers to contribute in implementing favourable climate change adaptation and mitigation measures is recognised. The provision of a sustainable food source that is not damaging to the climate and protects biodiversity is imperative in the future development of Waterford.
2. Water supply is the responsibility of Irish Water. The protection of water sources is the responsibility of WCCC is dealt with in the strategy through Integrated Catchment Management.
3. The Severe Weather Assessment Team will monitor the impact of extreme weather events and allocate resources as appropriate.
4. The impact of inland aquaculture and sea food related infrastructure has been considered within the Climate Change Adaptation Strategy Document.
5. WCCC recognises the invaluable work that is carried out by Farmers and agricultural contractors during severe weather events, such as the clearing of snow from WCCC road network undertaken after "Storm Emma" in 2018.
6. This is an area that has been considered by WCCC Fire Department who will allocate appropriate resources when required.
7. Water quality levels in streams and rivers are regularly monitored and recorded by WCCC. Such records are forwarded to the EPA periodically. Any change in slurry spreading and nutrient content will be advised to farmers by the Department of Agriculture, Food and the Marine.
8. The impact of soil sediment run off and the related impact on water quality is a concern and a risk to water quality in rivers and streams and as a raw water source to water treatment plants. This matter can be addressed through Integrated Catchment Management.
9. WCCC have implemented national policies and practices to control and remove non native invasive species. All such removals are implemented as per national guidelines under the direction of the Council's Horticulturalist
10. WCCC implement measures within its statutory functions to repair infrastructure damaged by severe weather events. Where there is a health and safety risk to the general public at a location not under the ownership of WCCC, measures will be implemented to secure / protect such infrastructure.
11. Where irrigation interventions are required WCCC will work with IW to deliver such services. The protection of water sources and ground water supply is referenced within the strategy.



**Recommendation:**

**Amend Goal 1 Business Operations & Continuity – Objective 2 – Action 10**

|     |  |  |   |       |
|-----|--|--|---|-------|
| 10. | Encourage external agency and departmental collaboration to increase climate change resilience providing for: <ul style="list-style-type: none"><li>➤ Emergency planning and coordination</li><li>➤ Coordinating and sharing expertise &amp; experiences around adaptation actions.</li><li>➤ Liaison with the relevant Departments and Agencies regarding the implementation of actions set out in sectoral climate adaptation strategies.</li><li>➤ <b>Development of a plan to utilize the resources of farmers, agricultural contractors and community groups to clear and keep roads open after extreme weather events.</b></li></ul> | CARO.<br>C.A.S.G.<br>S.W.A.T.<br>Met Eireann.<br>Army. | ✓ | S - L |
|-----|--|--|---|-------|

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## **Sub No. 2: Environmental Protection Agency**

### **Summary of issues raised:**

1. The Strategy could describe the links with the UN Agenda 2030 for Sustainable Development and the relevant Sustainable Development Goals (SDGs). This is important so that climate adaptation planning is framed within the context of the wider sustainable development agenda. In identifying measures to respond to climate change, the Strategy should seek to align with and support progress in implementing with the relevant SDGs, with reference to the National SDG Implementation Plan.
2. The Strategy could include a schematic or graphic, clarifying the relationship between the Strategy and the Climate Act, the All-of-Government Climate Action Plan, National Adaptation Framework, adaptation guidelines etc.
3. We acknowledge that the Strategy commits to aligning with national commitments on climate change adaptation. Once the various sectoral adaptation strategies are published over the coming months, any relevant recommendations or actions should be incorporated into the Strategy (or subsequent reviews).
4. In preparing and implementing the Strategy, you should ensure that any potential negative environmental impacts are minimised. We recommend that the Strategy includes a commitment that potential adverse cumulative / in-combination environmental effects are accounted for when considering, selecting and implementing specific adaptation measures. This is important to ensure that environmental sensitivities under the Habitats Directive and Water Framework Directive are protected.
5. The Strategy should clearly reference the climate data and projections/scenarios used in developing the Strategy. It would be beneficial to develop a common set of climate projections that can be used for adaptation, infrastructure and investment planning to 2050 and beyond.
6. The Plan should refer to the relevant OPW flood risk management plans. The second cycle of OPW flood risk management plans is currently underway and will cover areas outside the scope of the first cycle, including more rural areas. These should help inform the Strategy and future reviews.
7. Where coastal impacts are identified, the Strategy should consider any relevant actions associated with integrated coastal zone management, in collaboration in with adjoining local authorities and other key stakeholders.
8. Where changes to the Strategy are made prior to finalisation, or where modifications to the Plan are proposed following its adoption, these should be screened for potential for likely significant effects in accordance with the criteria set out in Schedule 1 of the SEA Regulations (S.I. No. 435 of 2004).

9. In *Chapter 5 – Goals, Objectives and Actions*, consider including an additional high-level goal reflecting the need for more effective implementation of relevant related regulations, policies, plans and strategies with a role in climate adaptation and environmental protection.
10. *Section 5.2 Adaptation Actions and Framework for Waterford City & County Council*
  - Under Goal 3: Landuse and development, consider amending the text as follows “*Sustainable policies and measures are devised **and implemented** to influence positive behavioural changes, support climate adaptation actions ...*”
  - Under Goal 5: Natural Resources and Cultural Infrastructure, consider amending the text as follows “*Fostering **and implementing** meaningful approaches to protecting natural and key cultural assets...*”.
11. Adaptation responses can take the form of:
  - “grey” engineered measures to reduce climate hazards, such as the construction of flood defences;
  - “green” ecosystem or nature-based adaption measures, such as catchment attenuation, upgrading and conserving of existing sea defences and harbour infrastructure, the restoration of dune systems and wetlands to buffer against sea-level rise;
  - “soft” adaptations that aim to alter the behaviour of the public through policy or economic instruments, such as reusing buildings and reducing demolition, sourcing environmentally sustainable building materials for major infrastructure, offering discounted insurance on homes that retrofit flood defences or early warning systems that communicate directly and effectively to vulnerable communities and enable appropriate local actions in response to limit exposure and damage.
12. *Table Goal 2 – Infrastructure and Built Environment* refers to incorporating green infrastructure as a mechanism for carbon offset. We recommend also referring to the wider environmental benefits of green infrastructure, such as microclimate benefits including providing shade to alleviate heat stress, supporting for urban biodiversity, water retention, and flood alleviation etc. 6
13. *Table G7 – Biodiversity* Action 9 text could be amended to: “*an active **native** tree planting programme...*”
14. Action 11 relating to natural borders/buffers/blueways/greenways, we recommend that you consult with NPWS to ensure appropriate buffer zones are provided, maintained and protected, to avoid potential impacts on designated habitats or protected species and habitats, and to protect and enhance wider biodiversity.
15. *Chapter 6 – Implement, Monitor and Evaluate* There is merit in establishing an ‘Implementation Plan’ to deliver the actions set out in the Strategy. This implementation plan should consider the requirements of the SEA Directive and Habitats Directive, as relevant and where appropriate.

16. Further information could be provided on what monitoring will be carried out, and over what frequency, to determine the effectiveness of implementing the Strategy. The relationship with the Southern Regional Assembly should also be considered in terms of aligning monitoring aspects and any relevant regional objectives, set out of the Southern Regional Spatial and Economic Strategy.

**Response to issues raised in submission:**

1. Reference to UN Sustainable Development Goals will be included in Chapter 1.
2. The Strategy and its relationship with legislation and other national policy documents is set out in Chapter 1
3. Any periodic modifications / inclusions to the strategy will be implemented with the guidance of the CARO office. The strategy upon adoption will be subject to a bi-annual review.
4. WCCC will implement best practice to reduce the potential negative environmental impacts.
5. WCCC will include and implement projections / scenarios in future strategy updates as provided and advised upon by the DCCAE and under the guidance of the local CARO office.
6. The OPW CFRAM maps are reference as an implemental objective within the Strategy document. Future CFRAM updates will be included in future revisions of this strategy.
7. In the development of this strategy WCCC has collaborated with adjoining Local Authorities and other coastal Local Authorities in the Eastern & Midland CARO region and other key stakeholder through public consultation and through the activities organised by the CARO offices.
8. A further screening process will be undertaken prior to the finalisation of the strategy document.
9. Climate Change and environmental protection is included within all Goals, Objectives and Actions within the CCAS. Having a specific goal relating to environmental protection and related regulations, policies, plans and strategies is not deemed necessary at this time.
10. Wording will be amended
11. Strategy amended to reflect various adaptation responses
12. Wording will be amended
13. Wording will be amended
14. NPWS added as partner

15. An implementation plan will be prepared on adoption of the strategy.

16. The Climate Change Adaptation Strategy has a close relationship with the CDP tasking it with the integration of policies/objectives and development standards to pursue positive climate action (adaptation and mitigation). It is acknowledged that spatial planning is a key instrument to the practical implementation of actions and this will be monitored in the context of the monitoring arrangements in place for the CCAS.

**Recommendation:**

Reference to UN Sustainable Development Goals will be included in Chapter 1

Description of various adaptation responses will be included in strategy.

Wording to be amended as appropriate.

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**Sub No. 3: Fáilte Ireland**

**Summary of issues raised:**

1. Ireland's natural and cultural heritage are among the main reasons why visitors chose Ireland for their holidays. The impact of climate change on natural and cultural heritage can have negative consequences for tourism.
2. From a tourism perspective it is imperative that adaptation and mitigation measures carefully consider the impact on tourism and tourism amenities and to consider any unintended consequences for heritage and tourism that might arise.
3. The construction of coastal defences and inland flood relief works can have negative impacts on aspects of our natural and cultural heritage such as beaches, sand dunes and historic town centres.
4. Hard engineering works to protect coastal tourism assets or infrastructure must be considered in light of natural coastal processes and the potential long-term impacts on the heritage value, and indeed the tourism value of the area. It is vital that protection works do not exacerbate the problem, which may lead to the eventual undermining and possible complete loss of the tourism asset.

**Response to issues raised in submission:**

1. The installation of coastal defences and inland flood relief works can be constructed in a manner that has minimum negative impacts to natural and cultural heritage.
2. Hard engineering works will protect and consider the long term impacts of the tourism asset.

**Recommendation:**

None

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#### **Sub No. 4: Gas Networks Ireland**

##### **Summary of issues raised:**

GNI has considered the potential impact of climate change on the gas network and has worked with the Department of Communications, Climate Action and Environment to develop the 'Climate Change Adaptation Plan for the Electricity and Gas Network Sector'. Ireland's natural gas network consists of buried pipelines, which are not subject to the vulnerability of storms that can impact the delivery of oil or the transport of electricity through overhead wires. In addition, the routing of the gas network is designed to take account of flood plains, avoiding areas prone to flooding where possible.

Transportation of gas is unobtrusive and particular attention is taken to minimise the impact on local flora and fauna. GNI is committed to biodiversity and archaeology through the minimisation of the environmental impact of any construction and development activities. This involves a partnership approach with environmental and heritage groups on all construction projects, as well as employing engineers and environmental specialists to carry out environmental assessments at the planning and construction phases of developments. GNI returns all land to its original state following construction.

Moving energy through gas pipelines is considered the most efficient method of transporting energy and there is potential for this efficiency to be further exploited by connecting new customers to both the transmission and distribution networks. The existing transmission and distribution networks have spare capacity to accommodate new connections.

Transportation of energy through gas pipelines is the most efficient mode to transport energy and Ireland's gas network has proven its resilience for over 40 years in particular withstanding extreme weather conditions in recent years. GNI asks that the Council considers the role that CNG and renewable gas can play in reducing carbon emissions in the region.

##### **Response to issues raised in submission:**

The submission from GNI is noted.

GNI's submission also included Climate Change Mitigation. The implementation of mitigation measures is outside the scope of the Climate Change Adaptation Strategy but is expected to be included in future strategy documents.

##### **Recommendation:**

None

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## Sub No. 5: Geological Survey Ireland

### Summary of issues raised:

1. Geological Survey Ireland encourages the use of their data and maps when creating the EIAR for the Climate Adaption Strategy.
2. The Copper Coast is an UNESCO Geopark and Climate Change education and green tourism are one of the focus areas of UNSECO Global Geoparks.
3. Groundwater is important as a source of drinking water, and it supports river flows, lake levels and ecosystems.
4. With regards to flood risk management, there is a need to identify area for integrated constructed wetlands.
5. With anticipated changes in storm frequency and intensity, GSI has a number of ongoing projects looking at changes along the coastline such as erosion, sediment accumulation and flooding. We suggest that WCCC takes this into consideration and stays current with coastal models.

### Response to issues raised in submission:

1. Noted.
2. WCCC is supportive of the Copper Coast as a UNESCO Global Geopark and in particular the focus on climate change education.
3. The protection of ground water is an objective within the adaptation strategy document.
4. WCCC will consider flood risk management on a case by case basis and implement best practice in regards to constructed wet lands and have a regard for GSI's "National Aquifer and Recharge Maps".
5. Noted.

### Recommendation:

#### Amend Goal 4 Water Services – Objective 1 – Action 2

|    |   |                                     |   |   |
|----|---|-------------------------------------|---|---|
| 2. | Ensure that potential flood information is obtained and generated through a Flood Risk Assessment (FRA) that is then used to inform suitable adaptation requirements within planning and development management in line with the guidelines on the planning System and Flood Risk Management. <b>National aquifer and recharge maps will be reviewed as part of this process.</b> | Planning.<br>Environment.<br>CFRAM. | ✓ | S |
|----|---|-------------------------------------|---|---|



**Sub No. 6: Irish Water**

**Summary of issues raised:**

1. Irish Water looks forward to collaborating with Waterford County Council in implementing the measures set out in the recently published Government Climate Action Plan and in the Draft Climate Change Sectoral Adaptation Plan: Water Quality and Water Services Infrastructure published in May by the DHPLG, in particular as regards using Integrated Catchment Management [ICM] to provide a cost-effective, sustainable means to reduce the sources of pollutants, and to slow, limit or restrict pathways of pollutants to water bodies.

**Response to issues raised in submission:**

1. WCCC will have regard to the Draft Climate Change Sectoral Adaptation Plan: Water Quality and Water Services Infrastructure, particularly measures to improve resilience to climate change and reduce the input of pollutants to areas draining to rivers, lakes, groundwater sources and coastal areas. Integrated catchment management measures may be implemented at the scale of a whole catchment, or be more localised, for example actions taken by one land owner. Integrated catchment management is relevant in terms of reducing inputs of pathogens, sediment, nutrients and pesticides to water bodies. Integrated catchment management is also of benefit for flood and drought management using measures such as surface water management, SUD (Sustainable Urban Drainage) and natural storage of water. Stakeholder engagement forms a crucial part of integrated catchment management. The Council will work with Irish Water and LAWCO in the implementation of the above.

**Recommendation:**

Amend Goal 4 Water Services – Objective 3 – Action 9

|    |  |   |   |   |
|----|--|---|---|---|
| 9. | Protection of water sources servicing treatment plants and protection of ground water supply through the implementation of Integrated Catchment Management | Water Services<br>LAWCO<br>Irish Water. | ✓ | L |
|----|--|---|---|---|

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**Sub No. 7: Office of Public Works**

**Summary of issues raised:**

1. The term 'CFRAM' is noted a number of times as Lead & Partner (Goal 3, 4 and 8). Please note that CFRAM was a study that is now completed. The outputs are the Flood Risk Management Plans including a number of flood maps but it is not a body (Lead or Partner). We would suggest to remove the term from Lead & Partner.
2. Most of the actions under Goal 8 refer to coastal flooding and we would suggest to rename this goal to '*Coastal Flooding and Erosion*'. OPW could then be a partner under Goal 8 Objective 1.1, 1.2, 1.3, 1.4 and 1.5 but not 1.6 or 1.7.
3. The towns of Aghlish and Ballyduff are identified as "*tranche 1*" flood protection schemes and Dungarvan & Environs in the second phase as "*tranche 2*" flood protection schemes; all of these schemes will consider climate change adaptation. The OPW would welcome their promotion and support within the Strategy.
4. OPW is noted under Goal 6 Objective 1 '*To build capacity and resilience within communities to help minimise the effects of extreme weather events.*' This has been noted in other LA strategies but OPW is not aware of this role.

**Response to issues raised in submission:**

1. CFRAM will be removed from Lead/ Partner but will be included within the actions where applicable. OPW will be included as partner.
2. Renaming Goal 8 to "*Costal Flooding and Erosion* is acceptable, OPW to be included as a partner under actions 1.1, 1.2, 1.3, 1.4 and 1.5 within document.
3. The strategy does not identify specific projects but WCCC will support the delivery of these schemes.
4. OPW will be removed as Partner on this action.

**Recommendation:**

Replace CFRAM with OPW as Lead/Partner as appropriate.

Goal 8 renamed Coastal Flooding and Erosion

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**Sub No. 8:** EcoMerit Environmental Business Support

**Summary of issues raised:**

- Welcomes the publication of WCCC's draft Climate Change Adaptation Strategy.
- Adaptation is one of two main strands in addressing climate change, the other being mitigation or reducing the emission of greenhouse gases
- Offer of help to organisations to reduce their emissions, save water, reduce waste and cut costs.

**Response to issues raised in submission:**

The implementation of mitigation measures is outside the scope of the Climate Change Adaptation Strategy but is expected to be included in future strategy documents.

**Recommendation:**

None

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**Sub No. 9:** Waterford City & County Environmental Linkage Group

**Summary of issues raised:**

1. Recommend that all SPCs will include in their work plan (agendas, etc), a consideration of how climate change might impact on their respective areas of responsibility and accordingly to recommend actions where appropriate.
2. It is recommended that a climate action task force is formed and should include participation of the ELG and the PPN.

**Response to issues raised in submission:**

1. Members of the PPN can make a contribution to the implementation of the strategy via representation of PPN on the Environmental Services SPC, who will review and provide input into the implementation of the adaptation strategy, which will be reported upon by the CASG.

**Recommendation:**

None

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**Sub No. 10:** Cllr. Marc Ó Cathasaigh

**Summary of issues raised:**

1. Waterford City Council have signed up to the "EU Covenant of Mayors" on the 9/5/2011. Reaffirming our commitment to the Covenant of Mayors programme would be an important step along the road in our climate mitigation measures, but not if we are only paying lip-service to the goals and ideals contained therein.
2. The size of the Climate Action Regional Office (CARO) region is too large and a Midlands and South East region would better meet the challenges of Climate Change Adaptation and Mitigation.
3. On page 31 of the Risk Statement, the impact of sea-level rise biodiversity is rated as a low priority. I cannot agree that the risk presented by sea-level rise is a low risk factor.
4. Detail on the structure and composition of the Climate Action Steering Group, which will be formed to implement the strategy, is required.
5. Further in Goal 1, Objective 1, I believe there is a need to strengthen the language used. Under No. 3, 'Explore the potential of appointing a Climate Action Officer' should be changed to 'Appoint a Climate Officer'. Likewise in No. 5, 'consider changing the title' should be altered to read 'change the title'.
6. Under Goal 2, Objective 1, No. 2 reference is made to green infrastructure. The Green Infrastructure Plan is, as I understand it, unfinished. Finishing and implementing this plan should be a goal explicitly included in this section of our Climate Adaptation Plan.
7. In Goal 3 - Land Use and Development Policy: It is disappointing that no specific landscape features in the county are referenced or any specific outcomes listed.
8. Under Goal 3, Objective 1: There is very little specific consideration here of how we plan to hold and retain stormwater. There is huge scope here to consider the use of rain gardens to harvest and retain water in our cities, to plan for the restoration of our upland bogs and wetlands to absorb and retain water and to consider upstream soft engineering options that could alleviate flooding along our rivers. There is similarly no discussion of the 'Room for the River' approach which has been successfully adopted in many areas in the Netherlands.
9. Goal 4: There is no mention at any point here of initiatives aimed either at the reuse of grey water within our water services system or rain water harvesting measures. Considering that climate modelling points to increased and more prolonged periods of drought in the Southeast, I would expect these methods of water conservation to be given due consideration in the final draft of this adaptation plan.
10. Goal 6, Objective 3: In considering climate change resilient communities, our climate adaptation plan should investigate possibilities around planning for micro-grids in both new and existing housing developments as well as fostering the development of Sustainable Energy Communities.

11. There is a role for the council in encouraging food resilience through Community Supported Agriculture (CSA) models and local food initiatives such as community gardens and allotments associations.

**Response to issues raised in submission:**

1. Waterford County Council had signed up to the "Covenant of Mayors", however the merged Waterford City and County Council did not renew the commitment to the Covenant of Mayors. In recent years the Council has not actively engaged with this initiative. If WCCC is to renew its involvement then resources will need to be allocated to this project.
2. The structure of the CARO Offices is outside the scope of this adaptation strategy and was implemented by the DCCAIE.
3. The sea level rise has a low risk factor for biodiversity in regards to the impact on Waterford City and County Council activities and statutory functions.
4. The Climate Action Steering will be made up of high level staff within WCCC and be chaired by the Director of Services for Environment. The activities of this committee will be reported upon periodically to the WCCC Environment SPC.
5. The appointment of a Climate Action Officer would be subject to budget and Department approval. Changing of the title of the SPC is a matter for the SPC and the Elected Council in accordance with the SPC Scheme.
6. A Green Infrastructure strategy will be included as part of the next Development Plan
7. A Land Use Characterisation Study forms part of the Development Plan, any actions arising from the strategy will have regard to the study.
8. This item is dealt with under Goal 4 action 7.
9. This item is dealt with under Goal 4 action 7.
10. The installation/ development of micro grids and the development of Sustainable Energy Communities are mitigation measures and not covered under this Adaptation strategy.
11. WCCC currently support community gardens in Dungarvan and Tramore and also support food festivals and food markets throughout the county.

**Recommendation:**

Amend Goal 3 Land Use and Development Policy – Objective 1 – Action 3

The Action 3 in the draft was a duplicate of Action 2.

|    |   |           |   |   |
|----|---|-----------|---|---|
| 3. | A Green Infrastructure strategy will be included as part of the next Development Plan | Planning. | X | S |
|----|---|-----------|---|---|

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**Sub No. 11:** Cllr. Jody Power

**Summary of issues raised:**

1. Goal 1/ Objective 1 /Action 6: WCCC to provide leadership and consultation to local businesses in the planning and implementation of climate change mitigation and adaptation strategies (CCMAS)
2. WCCC to instruct all WCCC members of external boards to promote and vote for WCCC policies regarding CCMAS. WCCC to ultimately eliminate all actions that currently contribute to climate change and desist from all future actions that augment the problem.
3. G2/ O2/ A 10 - to include. Civil Defence and Garda.
4. G3/ O2/A 6- Include the words ".....Sustainable transport networks, MACHINERY and INFRASTRUCTURE across...."Remove the word "encourage" and Insert "Promote and Adopt".
5. G6/ O1/ A WCCC to identify and provide emergency homeless shelters and provisions for mass evacuation potentialities.
6. G6/ O2/ A 9. Risk Assessments of Trees on Roads.....please add " 30 days public notice given before any and all destruction of habitat in the public realm".

**Response to issues raised in submission:**

1. WCCC has completed a public consultation process in regards to the Climate Change Adaptation Strategy. Upon adoption the CCAS will be promoted among local businesses via the Economic Development Department and LEO focussing on creating economic and business opportunities from climate change and exploring how businesses, in addressing and responding to climate change, can realise unique economic and business opportunities
2. All WCCC representatives on external boards will be aware of WCCC Climate Change Adaptation Strategy and will be expected to use this knowledge as appropriate to advise external organisations of the impacts of climate change.
3. An Garda Síochána and the Civil Defence are represented on the Severe Weather Assessment Team (S.W.A.T.)
4. Action will be amended to include modes of transport
5. This will be included within G6/O1/3
6. A number of submissions referred to the use of trees as a climate adaptation measure. Goal 7 Biodiversity – Objective 1 Action 2 will be amended to allow for the preparation of a tree management strategy that will deal with the use of trees for climate adaptation.

**Recommendation:**

Goal 3 Land Use & Development Policy– Objective 2 Action 6 amended as follows:

|    |   |   |   |   |
|----|---|---|---|---|
| 6. | Implement a plan to promote Sustainable Transport Networks <b>including road infrastructure and modes of transport</b> across Waterford as an alternative way of travelling.<br><br>Encourage the use of Greenway / Blue way routes and other amenity trails. | Planning/Roads.<br><br>Waterford LEADER.<br><br>D.H.P.L.G | ✓ | S |
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Goal 6 Community Health & Wellbeing – Objective 1 Action 3 amended as follows:

|    |  |   |   |   |
|----|--|---|---|---|
| 3. | Develop a programme for vulnerable communities to enhance their capacity to respond to and recover from extreme weather events with aims such as:<br><br><ul style="list-style-type: none"> <li>➤ Providing advice on the risk of extreme events affecting their locality.</li> <li>➤ Providing support to develop appropriate resilience arrangements to enable response and recovery.</li> <li>➤ <b>identify and provide emergency homeless shelters and provisions for mass evacuation potentialities.</b></li> </ul> | C.A.S.G.<br><br>Community Section.<br><br>Civil Defence.<br><br>Gardaí/HSE.<br><br>Transportation.<br><br>Housing | X | M |
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Goal 7 Biodiversity – Objective 1 Action 2 amended as follows:

|    |   |   |   |   |
|----|---|---|---|---|
| 2. | Review the Waterford Biodiversity Action Plan and provide for actions that ensure:<br><br><ul style="list-style-type: none"> <li>➤ Risks from adverse climate change have been identified.</li> <li>➤ Carbon capture within habitats is considered.</li> <li>➤ Invasive species are examined.</li> <li>➤ Identify areas considered beneficial for use as local carbon offset through carbon sequestration<sup>1</sup>.</li> <li>➤ <b>Development of Tree Management Strategy</b></li> </ul> | Heritage Officer.<br><br>NBDC.<br><br>OPW.<br><br>Environment.<br><br>Planning.<br><br>Biodiversity officer.<br><br>Horticulturist. | ✓ | S |
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**Sub No. 12:** Susan Gallagher

**Summary of issues raised:**

1. Goal 1 Business Operations & Continuity Objective 2 Action 7. "When cleaning up after an extreme weather event, concentrate first on providing access to emergency services, and then on clearing footpaths, as the most vulnerable in our society are more likely to be walking rather than driving. In the aftermath of Storm Emma, snow was cleared from roads and piled up on footpaths, making some of them inaccessible.
2. Goal 2 Infrastructure and Built Environment, Objective 1 Action 1 - Use of swales, filter strips, or other suitable SUDS components to attenuate and treat runoff from roads.
3. Action 2, Consider using bioretention, raingardens or similar when designing footpaths in urban areas.
4. When planting trees, choose species that will not grow too big and choose native species and/or pollinator friendly species where possible.
5. Goal 3 Land Use and Development Policy Objective 1 Action 1 - Use natural water retention measures to meet flood management and biodiversity objectives. Prevent development on flood plains, and increase the available flood plain for rivers if necessary.
6. Action 2, Include urban greening as part of a SUDS train, where appropriate. When planting vegetation, choose native species where possible.
7. Include rainwater harvesting and/or green roofs as a planning requirement for new buildings.
8. Action 4; Reduce the volume of water reaching waste water treatment plants by reducing/limiting the amount of hard paving in urban areas.
9. Objective 2 Action 6. Include cycling and walking as part of this plan. Provide suitable cycle lanes, and widen footpaths to allow for wheelchair access. Prevent parking on footpaths, as this makes them inaccessible to users of buggies and wheelchairs. When new housing developments are being designed, incorporate walking routes to allow for easy access from one estate to another. In existing estates, create new walkways where possible.
10. Goal 4 Water Services Objective 2 Action 7. Most of the residential development in Waterford City took place before Sustainable Urban Drainage Systems (SUDS) were commonplace. Older parts of the city are served by combined sewers, which can easily become overwhelmed during heavy rainfall events. There are numerous examples of retrofitting SUDS in the UK, Belgium, France and The Netherlands. Dublin City Council recently trialed a downpipe rain garden project as a means of attenuating flow in the city. I would like to suggest that some of these ideas be incorporated in urban areas in Waterford. In addition, other development in Waterford has not incorporated SUDS. The redevelopment of Apple Market could have been an opportunity to include SUDS, but no such systems were used. During heavy rainfall, water flows down New Street and across the Apple Market paving, towards Spring Garden Alley. Some form of SUDS,

such as bioretention, permeable paving or SUDS tree pits in the area would have been welcome. Likewise, the work to develop Grattan Square in Dungarvan would have benefitted from some SUDS systems. I would like to see requirement to include appropriate SUDS included when development such as this is being undertaken.

**Response to issues raised in submission:**

1. "Storm Emma", was a rare extreme weather event. It was necessary to clear snow to keep all major and minor roads open to allow emergency services to operate and public services, businesses to reopen. The primary task after an extreme weather event is to get the transport network operational as soon as possible.
2. WCCC applies the standards as set out in the National Guidelines on Sustainable Urban Drainage Solutions to new developments as part of the flood risk mitigation of these developments
3. As 2 above.
4. A number of submissions referred to the use of trees as a climate adaptation measure. Goal 7 Biodiversity – Objective 1 Action 2 will be amended to allow for the preparation of a tree management strategy that will deal with the use of trees for climate adaptation.
5. WCCC currently reference CFRAM maps as a means of eliminating developments on flood plains.
6. A Green Infrastructure policy will be included as part of the next Development Plan and this combined with the National Guidelines on SUDS will address this issue.
7. WCCC implement the Building Regulation Standards, subsequent changes to these standards which includes rainwater harvesting and green roofs will be included as planning requirements for new buildings.
8. In new developments runoff water from hard paving goes into the drainage network and not into the sewerage network.
9. These items are climate change mitigation items and planning matters and not covered for within the adaptation strategy.
10. As 2 above.

**Recommendation:**

None

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**Sub No. 13:** Maoliosa Ní Chléirigh

**Summary of issues raised:**

1. Goal 1 Business operations and continuity: Objective 2. No 6: Aim to convert all Council's vehicles to clean energy vehicles (electric or hydrogen).
2. Goal 2: Infrastructure and Built Environment: Objective 1: No 1. That any road infrastructure programme should include the addition of an off-road bicycle lane and pedestrian path. Explore the possibility of these lanes being separated from the road by greenery if possible in the countryside.
3. Goal 3: Land Use and Development: Objective 1, No. 2: Add 'encourage urban renewal by assisting the renovation and insulation of inner city buildings'.
4. Goal 4: Water Services. Objective 1, No.6. Explore the possibility of using water-absorbing trees (willow and alder) to absorb river/lake flooding and avoid overruns by planting ten metres of trees on riverbanks where possible, and encouraging this practice on private lands.

**Response to issues raised in submission:**

1. This item comes under the category of climate change mitigation. The implementation of mitigation measures is outside the scope of the Climate Change Adaptation Strategy but is expected to be included in future strategy documents.
2. This item comes under the category of climate change mitigation. The implementation of mitigation measures is outside the scope of the Climate Change Adaptation Strategy but is expected to be included in future strategy documents.
3. This item comes under the category of climate change mitigation. The implementation of mitigation measures is outside the scope of the Climate Change Adaptation Strategy but is expected to be included in future strategy documents.
4. A number of submissions referred to the use of trees as a climate adaptation measure. Goal 7 Biodiversity – Objective 1 Action 2 will be amended to allow for the preparation of a tree management strategy that will deal with the use of trees for climate adaptation.

**Recommendation:**

Goal 7 Biodiversity – Objective 1 Action 2 amended as follows:

|    |  |                                    |   |   |
|----|--|------------------------------------|---|---|
| 2. | Review the Waterford Biodiversity Action Plan and provide for actions that ensure: <ul style="list-style-type: none"><li>➤ Risks from adverse climate change have been identified.</li><li>➤ Carbon capture within habitats is considered.</li></ul> | Heritage Officer.<br>NBDC.<br>OPW. | ✓ | S |
|----|--|------------------------------------|---|---|

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|--|--|---|--|--|
|  | <ul style="list-style-type: none"> <li>➤ Invasive species are examined.</li> <li>➤ Identify areas considered beneficial for use as local carbon offset through carbon sequestration".</li> <li>➤ <b>Development of Tree Management Strategy</b></li> </ul> | Environment.<br>Planning.<br>Biodiversity officer.<br>Horticulturist. |  |  |
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**Sub No. 14:** Jane Russell-O'Connor

**Summary of issues raised:**

1. Goal 3 - Land-use and development: Within point 3) to include that sustainable use of land should include that brown field sites should be given priority for development and retrofitting or redevelopment of derelict sites as opposed to development on green-field sites.
2. To promote the use of green roofs in urban development's
3. To increase street tree planting, promote the use of vertical planting in urban and semi-urban/rural areas.
4. Goal 4 Drainage and Flood Management, point 2: To include the use of SUDS, in particular the use of bio-retention (i.e.planting of native tree species to assist with soakage of excess water)
5. Goal 7 Biodiversity, point 5: Protection of biodiversity, planting of pollinator species in habitats to include reduction in fragmentation and the promotion of habitat corridors in rural and semi-rural areas.

**Response to issues raised in submission:**

1. This item will be covered within the next version of the County Development Plan and would not be considered a climate adaptation measure.
2. WCCC implement the Building Regulation Standards, subsequent changes to these standards which include standards for green roofs will be included as planning requirements for new buildings.
3. A number of submissions referred to the use of trees as a climate adaptation measure. Goal 7 Biodiversity – Objective 1 Action 2 will be amended to allow for the preparation of a tree management strategy that will deal with the use of trees for climate adaptation.
4. WCCC applies the standards as set out in the National Guidelines on Sustainable Urban Drainage Solutions to new developments as part of the flood risk mitigation of these developments
5. These areas are covered under the national biodiversity and pollinator plan.

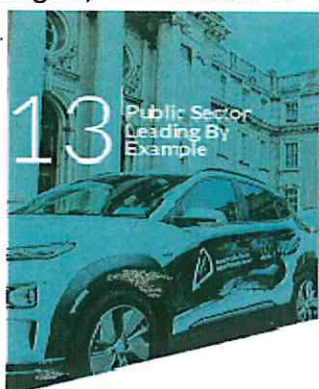
**Recommendation:**

None

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## 4.0 Climate Action Plan – To Tackle Climate Breakdown

The all of government Climate Action Plan 2019 - *To Tackle Climate Breakdown* was published on Monday 17<sup>th</sup> June 2019. The plan sets out 183 individual actions over 12 sectors and charts an ambitious course towards decarbonisation. It acknowledges the failure to meet emissions targets to 2020, failure to address efforts to decarbonise particularly during the period of the economic downturn and failure in breaking the link between emissions and economic growth. In light of this, the ambition is clearly set out to deliver a step-change in emission performance over the coming decade to meet 2030 targets and to set a trajectory to meet 2050 objectives. There is strong commitment under new governance arrangements to update the plan annually, to track performance of targets and revise or update the actions as necessary. To drive the successful and practical implementation of Climate Action towards achieving 2030 and 2050 targets, the Minister for Communications, Climate Action and Environment will bring forward a



### 13.2 Targets

To meet the required level of emissions, by 2030 we will:

- Reduce CO<sub>2</sub> eq. from the sector by 30%
- Improve the energy efficiency of public sector buildings by 50%
- Set a target to demonstrate leadership in the adoption of low emission transport options
- In 2019, have a Climate Mandate adopted by every Public Body, making the sector a catalyst for climate action
- In 2019, agree a Climate Action Charter with Local Authorities
- All Public Buildings to reach BER 'B' Rating

legislative framework through a new Climate Action Act.

Within the 12 Sectors described in the Plan, the Public Sector is identified as having a significant role in '*Leading by Example*'<sup>1</sup> to not only just reduce their own emissions but to inspire climate action across communities and society. Local Government in particular is recognized for its pivotal role in stimulating climate action at community level. The Plan speaks also to the role of the Climate Action Regional Offices (CARO) in assisting local authorities in building capacity to engage effectively with climate change. There are a range of actions that are specific to and/or relate to local authorities as well as the CAROs.

Local authorities will be required to undertake an annual programme with measurable impact particularly with actions to focus on, inter alia;

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<sup>1</sup> Chapter 13

- Reducing emissions by 30% and Improve energy efficiency of local authority buildings by 50% under the guidance of a new Public Sector Decarbonisation Strategy.
- Setting a target to demonstrate leadership in the adoption of low emission transport options
- Developing and implementing a Climate Action charter
- Public buildings (all) to reach BER 'B' Rating
- Building capacity through upskilling and knowledge dissemination
- Supporting and delivering projects that include strong ambition on climate action through funding resources from Project Ireland 2040
- Developing robust community engagement on climate action by linking to existing and new networks and clustering initiatives using the National Dialogue on Climate Action and local authority structures.
- Working with communities to expand Sustainable Energy Communities.
- Continue to implement Adaptation Planning with emphasis on building Climate Resilience and delivering the objectives of the National Adaptation Framework.

On Climate Change Adaptation, the Plan is very strong on the need *to address the current and future risks posed by a changing climate... Adaptation is both urgent and essential to successfully transition to a climate resilient economy and society by 2050<sup>2</sup>*. It cites examples of extreme weather events to explain that the cost of inaction to the effects of climate change are simply too significant to discount.

It is acknowledged that much of the focus for the local authority sector to date, has been on Adaptation Planning. Local authorities are now prescribed to widen their scope and act as a catalyst for much wider change. Since 2018 Climate Action Regional Offices (CAROs) have been co-ordinating the Local Authority response to Climate Change. The structures deployed have proved highly effective and can be utilised to direct local authority actions within the Climate Action Plan. The CAROs will lead a step up in climate action within local authorities to pursue mitigation measures to reduce emissions, activate meaningful citizen engagement, encourage community leadership and capacity building using the National Dialogue on Climate Action linking in with existing and new local authority structures.

**The Climate Action Plan is notably focused on mitigation measures to achieve emission targets to 2030. However, there is full commitment to provide clear leadership in promoting Adaptation. Recognising that Climate Change is a hugely complex issue that requires a range of responses from every sector in society all measures collectively represent a coherent approach to dealing with the challenges ahead.**

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<sup>2</sup> Chapter 16

Local Authorities, through the process of Adaptation Planning are gaining a clear understanding of the risks presented by climate change and the current levels of vulnerability to such risks. Actions identified in the adaptation strategies are aimed at building climate resilience and integrating adaptation into effective local level decision making. This is crucially important. Building on this work, local authorities will undoubtedly need to expand their role to take on actions and measures from the Climate Action Plan to respond to and meet obligations set out.

It is important that the Waterford City and County Climate Change Adaptation Strategy recognizes the purpose of the Climate Action Plan and the role intended for Local Authorities to meet targets and contribute to the national climate ambition.

It is recommended to include an action to reflect same in the Adaptation Strategy.

**CE Recommendation for adaptation strategy:**

Include action in Adaptation Strategy in Goal No 1 Business Operations & Continuity under Objective No 1:

**Building on adaptation planning actions set out in this strategy, support and complement the practical implementation of actions arising from the National Climate Action Plan – to Tackle Climate Breakdown (as revised and updated annually), across the broad range of functions of the local authority to achieve the national climate ambition i.e. decarbonisation targets to 2030 and objectives to 2050.**



## **5.0 Environmental Assessment**

### **5.1 Strategic Environmental Assessment**

The proposed amendments to the draft adaptation strategy as recommended in this report have been screened in accordance with the EC (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI 435 of 2004 as amended by SI 200 of 2011). Based on the pre-screening check and review of the amendments against the environmental criteria as set out in Annex II of the SEA Directive, a Strategic Environmental Assessment is not required. The screening report and final determination accompany the final adaptation strategy.

### **5.2 Appropriate Assessment**

The proposed amendments to the draft adaptation strategy as recommended in this report were screened in accordance with the requirements of Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC) to determine if they are likely to have a significant effect on any Natura 2000 sites. No significant effects were identified – the AA screening report accompanies the final adaptation strategy

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<sup>i</sup> a natural or artificial process by which carbon dioxide is removed from the atmosphere and held in solid or liquid form  
<sup>ii</sup> a natural or artificial process by which carbon dioxide is removed from the atmosphere and held in solid or liquid form